

# Flights of Endeavour (OV-105)

## (1992 to date)

Times

OV-105 Flown	Mission Name	Crew	Launch Pad	Launch & Date	Landing Date & Site	Primary Payload
1	STS-49	Brandenstein, Chilton, Melnick, Akers, Hieb, Thuot, Thornton	39B	05/07/92	05/16/92 at EAFB	Rescue, redeploy INTELSAT VI (F-3)
2	STS-47	Gibson, Brown, Lee, Davis, Apt, Jemison, Mohri	39B	09/12/92	09/20/92 at KSC	Spacelab-J
3	STS-54	Casper, McMonagle, Harbaugh, Runco, Helms	39B	01/13/93	01/19/93 at KSC	Tracking and Data Relay Satellite (TDRS-F)
4	STS-57	Grabe, Duffy, Low, Sherlock, Voss, Wisoff	39B	06/21/93	07/01/93 at KSC	SPACEHAB; EURECA Retrieval
5	STS-61	Covey, Bowersox, Musgrave, Hoffman, Thornton, Akers, Nicollier	39B	12/02/93	12/13/93 at KSC	Hubble Space Telescope First Servicing Mission
6	STS-59	Gutierrez, Chilton, Godwin, Apt, Clifford, Jones	39A	04/09/94	04/20/94 at EAFB	Space Radar Laboratory-1 (SRL-1)
7	STS-68	Baker, Wilcutt, Jones, Bursch, Wisoff, Smith	39A	09/30/94	10/11/94 at EAFB	Space Radar Laboratory-2 (SRL-2)
8	STS-67	Oswald, Gregory, Jernigan, Lawrence, Grunsfeld, Durrance, Parise	39A	03/02/95	03/18/95 at EAFB	Astro-2
9	STS-69	Walker, Cockrell, Voss, Newman, Gernhardt	39A	09/07/95	09/18/95 at KSC	Wake Shield Facility-2; Spartan-201-3
10	STS-72	Duffy, Jett, Barry, Chiao, Scott, Wakata	39B	01/11/96	01/20/96 at KSC	Japanese Space Flyer Unit (SFU); Office of Aeronautics and Space Technology (OAST) Flyer
11	STS-77	Casper, Brown, Thomas, Bursch, Runco, Garneau	39B	05/19/96	05/29/96 at KSC	SPACEHAB-4; Inflatable Antenna Experiment (IAE)
12	STS-89	Wilcutt, Edwards, Anderson, Dunbar, Reilly, Sharipov. Embarking (Mir 24): Thomas. Returning (Mir 24): Wolf	39A	01/22/98	01/31/98 at KSC	Eighth Shuttle-Mir docking
13	STS-88	Cabana, Sturckow, Currie, Ross, Newman, Krikalev	39A	12/04/98	12/15/98 at KSC	Space Station Assembly Flight 2A
14	STS-99	Kregel, Gorie, Kavandi, Voss, Mohri, Thiele	39A	02/11/00	02/22/00 at KSC	Shuttle Radar Topography Mission
15	STS-97	Jett, Bloomfield, Tanner, Noriega, Garneau	39B	11/30/00	12/11/00 at KSC	6th ISS Mission - U.S. Solar Arrays
16	STS-100	Rominger, Ashby, Hadfield, Parazynski, Phillips, Lonchakov, Guidoni	39A	04/19/01	05/01/01 at EAFB	9th ISS Mission - SSRMS; MPLM Raffaello; UHF Antenna
17	STS-108	Gorie, Kelly, Godwin, Tani, (up) Onufriyenko, Walz, Bursch, (down) Culbertson, Tyurin, Dezhurov	39B	12/05/01	12/18/01 at KSC	12th ISS Mission - Utilization Flight 1; Crew Rotation; MPLM Raffaello
18	STS-111	Cockrell, Lockhart, Chang-Diaz, Perrin; (up) Korzun, Whitson, Treschev; (down) Onufrienko, Bursch, Walz	39B	06/05/02	06/19/02 at EAFB	14th ISS Mission - Utilization Flight 2; Mobile Base System; Orbital Replacement Unit; MPLM Leonardo
19	STS-113	Wetherbee, Lockhart, Lopez-Alegria, Herrington; (up) Bowersox, Budarin, Pettit; (down) Korzun, Whitson, Treschev	39A	11/23/02	12/07/02 at KSC	16th ISS Mission; P1 Integrated Truss Segment
20	STS-118	Kelly, Hobaugh, Williams, Morgan, Mastracchio, Caldwell, Drew	39A	08/08/07	08/21/07 at KSC	22nd ISS Mission: S5 truss, gyroscope, ESP3
21	STS-123	Gorie, Johnson, Linnehan, Behnken, Foreman, Doi (up) Reisman; (down) Eyharts	39A	03/11/08	03/26/08 at KSC	25th ISS Mission: Japanese ELM-PS
22	STS-126	Ferguson, Boe, Bowen, Kimbrough, Stefanyshyn-Piper, Pettit, (up) Magnus; (down) Chamitoff	39A	11/14/08	11/30/08 at EAFB	MPLM Leonardo



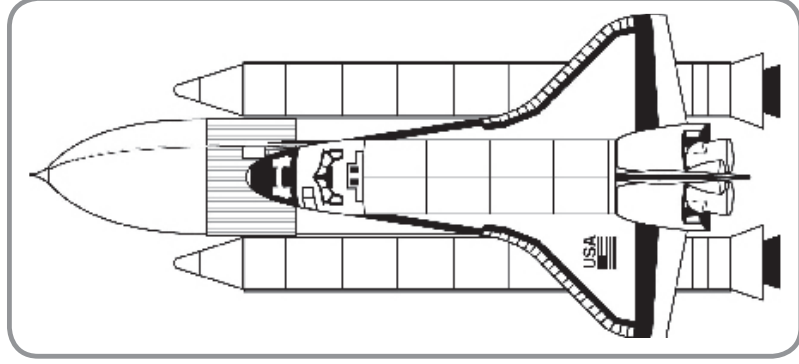
# Endeavour (OV-105)

America's fleet of Space Shuttle orbiters are named after pioneering sea vessels which established new frontiers in research and exploration.

NASA delved through the history books to find ships which achieved historical significance through discoveries about the world's oceans or the Earth itself. Another important criterion in the selection process was consideration for the international nature of the Space Shuttle program.

Endeavour, the newest addition to the four-orbiter fleet, is named after the first ship commanded by James Cook, the 18th century British explorer, navigator and astronomer. On Endeavour's maiden voyage in August 1768, Cook sailed to the South Pacific to observe and record the infrequent event of the planet Venus passing between the Earth and the sun. Determining the transit of Venus enabled early astronomers to find the distance of the sun from the Earth, which then could be used as a unit of measurement in calculating the parameters of the universe. Cook also discovered and charted New Zealand, surveyed the eastern coast of Australia and navigated the Great Barrier Reef there.

Cook's voyage on the Endeavour also established the usefulness of sending scientists on voyages of exploration.



erkraut and an orange extract. The Endeavour was small at about 368 tons, 100 feet in length and 20 feet in width. She had a round bluff bow and a flat bottom. The ship's career ended on a reef along Rhode Island.

For the first time, a national competition involving students in elementary and secondary schools produced the name of the new orbiter; it was announced by President George Bush in 1989. The Space Shuttle orbiter Endeavour was delivered to Kennedy Space Center in May 1991, and flew its first mission, highlighted by the dramatic rescue of a stranded communications satellite, a year later in May 1992.

The first orbiter to fly in space was Columbia in 1981. Three others preceded Endeavour: Challenger, which arrived in 1982 and was destroyed shortly after liftoff four years later (Endeavour replaced it); Discovery in 1983; and Atlantis in 1985. A test vehicle, the Enterprise, was used for suborbital approach and landing tests, and did not fly in space.

In the day-to-day world of Shuttle operations and processing, Space Shuttle orbiters go by a more prosaic designation. Endeavour is commonly referred to as OV-105, for Orbiter Vehicle-105. Columbia, Discovery and Atlantis are, respectively, OV-102, OV-103 and OV-104.

While sailing with Cook, naturalists Joseph Banks and Carl Solander collected many new families and species of plants, and encountered numerous new species of animals.

Endeavour and her crew reportedly made the first long-distance voyage on which no crewman died from scurvy, the dietary disease caused by lack of ascorbic acids. Cook is credited with being the first captain to use diet as a cure for scurvy, when he made his crew eat cress, sau-

# NASA facts